

Work Order ID 63341

Wednesday, October 27, 2010 3:59:57 PM

Page 1

Item ID: D412-711-101

Accept

Setup Start

Revision ID:

Stop

Item Name: Replacement Bubble Window

Start Date: 10/27/2010 Start Qty: 1.00

Cust Item ID:

Required Date: 11/11/2010 Req'd Qty: 1.00

Customer:

Reference:

Approvals:

Process Plan: HDate: 10-10-28

Tooling: -

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D412-711-101

A

100

0.00



DC

Document Control

Memo

Photocopy bluefiles and create labels
for PPP D412-711-101 Change 002

0.00

*Scollin***Car BG 10-11-02 ①*

110

0.00



HandThermo

Hand Finishing Thermoforming

HAND FINISHING THERMOFORMING

Memo

Set up Machine as per folio FTA 077 and D711W program

0.00

1 *BB*
10/10/28

120

0.00



HandThermo

Hand Finishing Thermoforming

HAND FINISHING THERMOFORMING

Memo

Cut Blanks to 36" by 39"

0.00

1 *BB*
10/10/28

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 63341

Wednesday, October 27, 2010 3:59:57 PM

Page 2

Item ID: D412-711-101

Accept

Setup Start

Revision ID:

Stop

Item Name: Replacement Bubble Window

Start Date: 10/27/2010 Start Qty: 1.00

Cust Item ID:

Required Date: 11/11/2010 Req'd Qty: 1.00

Customer:




Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130  Thermoform Thermoforming Machine	THERMOFORMING MACHINE Memo Thermoform as per Dwg. D412-711-101 using DT 9640 and Folio FTA 077 Dwg. Rev. <u>A</u> Folio Rev. _____	0.00 0.00				1			BB 10/10/28
140  QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo 1) Check Surface finish for undesired marks, voids, dimples etc. 2) Check depth of bubble to ensure conformity to drawing tolerances.	0.00 0.00				1			BB 10/10/28
150  QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00				1			Ph 10/10/28

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 63341

Wednesday, October 27, 2010 3:59:57 PM

Page 3

Item ID: D412-711-101

Accept

Setup Start

Revision ID:

Stop

Item Name: Replacement Bubble Window

Start Date: 10/27/2010 Start Qty: 1.00

Cust Item ID:

Required Date: 11/11/2010 Req'd Qty: 1.00

Customer:







Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160  HandThermo	HAND FINISHING THERMOFORMING	0.00				1			 10/10/28
Hand Finishing Thermoforming	Memo 1) Trim off excess flange material 2) Buff out any light scratches or 3) Etch part number and batch number	0.00							
170  QC	QC2- Inspect parts off machine FAI/FAIB	0.00				1			 10/11/01
Quality Control	Memo 1) Visually inspect for clarity, and proper formation.	0.00							
180  QC	QC5- Inspect part completeness to step on W/O	0.00							 8/10/4/01
Quality Control	Memo 1) Visually inspect for clarity, and proper formation.	0.00							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 63341

Wednesday, October 27, 2010 3:59:57 PM

Page 4

Item ID: D412-711-101

Accept

Setup Start

Revision ID:

Stop

Item Name: Replacement Bubble Window

Start Date: 10/27/2010 Start Qty: 1.00

Cust Item ID:

Required Date: 11/11/2010 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

185

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control

190

Identify as per dwg & Stock Location: _____

0.00



Packaging

Memo

0.00

Packaging

200

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

(X)

10/11/02

GR 10/11/02

CMF

10-21-2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, October 27, 2010 4:00:00 PM

Page 1

Work Order ID: 63341



Parent Item: D412-711-101



Parent Item Name: Replacement Bubble Window

Start Date: 10/27/2010

Required Date: 11/11/2010

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A New Issue 06-02-01 JLM
Manufacture in-house 10/06/28 DL

IPP Rev. B.

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MACRLICS.236		Purchased	No				sf	73.0000	16	16			

Plexiglass G .236"

Location

Loc Qty

Loc Code

therm

73

113571

17

115096

16

115590

40

BB
10/10/28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 63341
Description: Bubble Window	Part Number: D412-711-101
Inspection Dwg: D412-711-101 Rev: A-	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST
THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than "	✓			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by: JB	Date: 10/10/01
------------------------	-----------------------

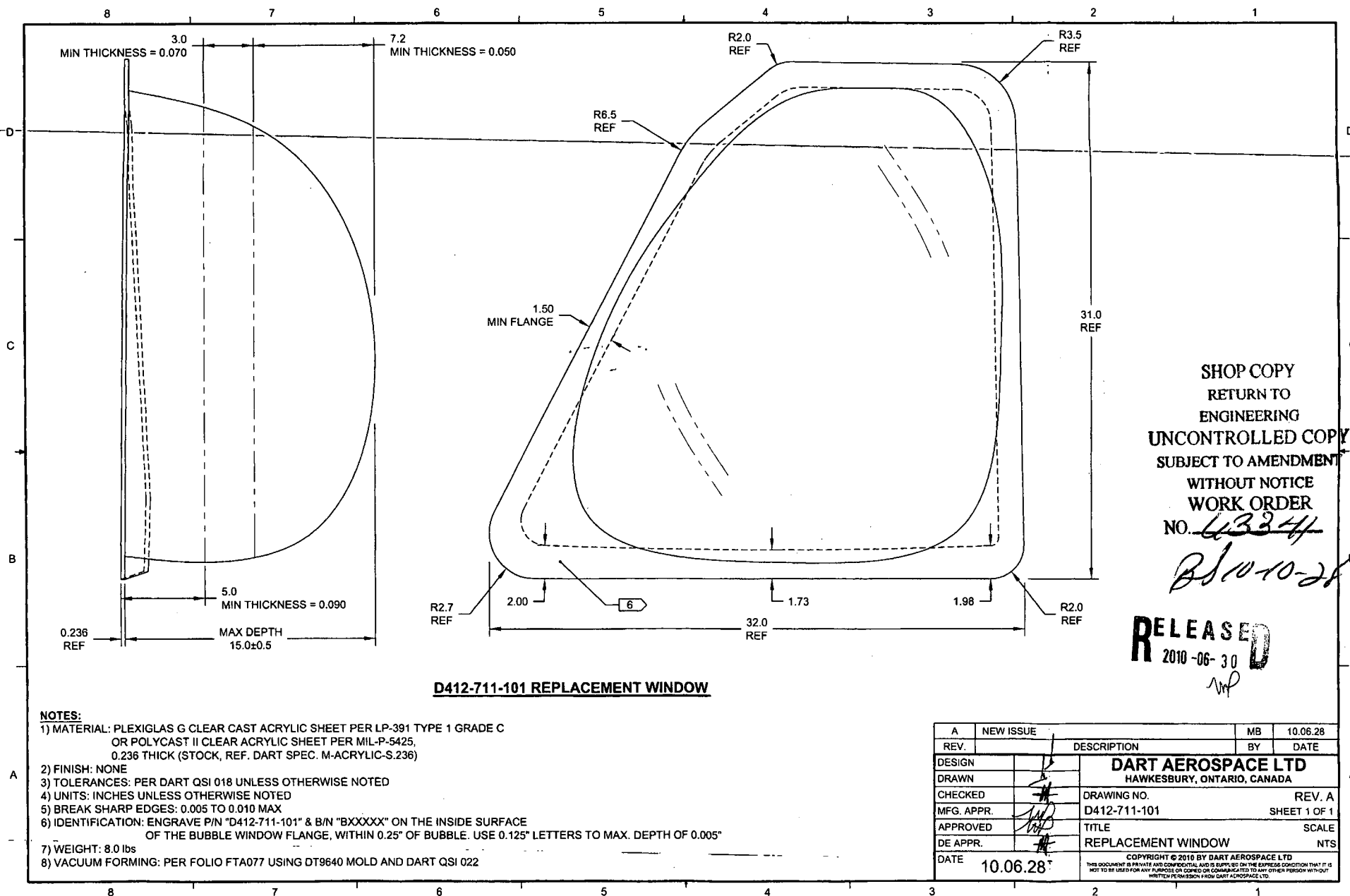
TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
32.0	REF	32.125	✓			
31.0	REF	31	✓			
1.50	Min	1.6	✓			
1.73	Min	1.825	✓			
8" 4.070	Min	.084	✓			
5" .090	Min	.093	✓			
.050	Min	.070	✓			
15	± 0.5	15.06	✓			

Measured by: JB	Date: 10/11/01
Audited by: [Signature]	Date: 10/11/01
Preliminary Approval:	Date:

Rev	Date	Change	Revised by	Approved
B	10.04.14	Added preliminary approval	KJ	

10.04.14



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 6324
BS1010-28

RELEASED
2010-06-30
MP

REV	DESCRIPTION	MB	DATE
A	NEW ISSUE		10.06.28
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.06.28		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
DRAWING NO. D412-711-101
REV. A
SHEET 1 OF 1
TITLE
REPLACEMENT WINDOW
SCALE
NTS
COPYRIGHT © 2010 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries